

Tom Buscheck
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Biography

In his current role, Tom is principal investigator of the Earth Battery Project, funded by DOE's Technology Commercialization Fund and Carbon Storage Program. Tom holds a B.S. in civil engineering from Lafayette College and an M.S. and Ph.D. in civil and geological engineering from the University of California, Berkeley. His educational background also includes mechanical engineering and Earth sciences. His research has spanned a range of environmental and clean-energy applications. He led a team that developed and applied simulation tools used to help design and assess the proposed nuclear waste repository at Yucca Mountain. His research includes aquifer thermal energy storage, geothermal energy, subsurface seasonal heat storage, granular-media heat storage, and geological CO₂ storage, with a focus on active reservoir management to enable safe and secure CO₂ storage. He has developed a portfolio of Earth Battery technology disclosed in three issued and three pending patents, with a recent focus on hybrid-energy systems for power and industrial-heat applications, such as in cement manufacturing.